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## REMARKS

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Claims 2-3, 6-7, 9, 15-19, 25, 27, 33-35, and 37 have been allowed by the Examiner. The Examiner is thanked for this allowance.

The Examiner has further rejected Claims 13 and 31 under 35 U.S.C. 103(a) as being unpatentable over Wong et al., U.S. Patent No. 6,078,335, in view of Malzbender, U.S. Patent No. 6,297,834. Applicant respectfully disagrees with this rejection.

Specifically, the Examiner relies on the following excerpt from Malzbender to make a prior art showing of applicant's claimed "wherein the LOD value is calculated for dependent textures" (see Claims 13 and 31).

"The direction-dependent texture map 16 holds parameters that define a surface structure in a manner in which the appearance of the surface structure varies with either view direction or light source direction. The graphics processor 14 maps the surface structure defined in the direction-dependent texture map 16 onto the polygons obtained from the buffer 12 during scan conversion. The result is a more realistic rendering of 3D features in a surface on a 3D object in comparison to texture mapping but without the computational penalties associated with bump mapping." (see col. 3, lines 16-27)

Such excerpt and the remaining Malzbender reference, however, makes absolutely no mention of any LOD value, let alone a "LOD value [that] is calculated for dependent textures." Applicant respectfully asserts that simply nowhere in the prior art is there any calculation of an LOD value specifically for dependent textures.

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed

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combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck*,947 F.2d 488, 20 USPQ2d 1438 (Fed.Cir.1991).

Applicant respectfully asserts that the third element of the *prima facie* case of obviousness has not been met, since the prior art references, when combined, fail to at least suggest <u>all</u> of applicant's claim limitations. Again, a notice of allowance or a specific prior art showing of each of the foregoing limitations, in combination with the remaining claim elements is respectfully requested.

The Examiner has further rejected Claims 14 and 32 under 35 U.S.C. 103(a) as being unpatentable over Malamy et al., U.S. Patent No. 6,100,898, in view of Chistofferson et al., U.S. Patent No. 6,222,555. Applicant respectfully disagrees with this rejection, especially in view of the amendments made hereinabove.

In particular, the Examiner relies on the following excerpt from Chistofferson to make a prior art showing of applicant's claimed "wherein the LOD value is calculated for cube environment mapping" (see Claims 14 and 32).

"Level of Detail (LOD) transitions

By far the most generally useful method for scene complexity reduction is employing Levels of Detail (LOD's). A database created with multiple LOD's allows the geometric density of the database to vary depending on viewing distance. For instance, a building seen from a distance might be represented by a cube, but when viewed close up it may have much greater geometric detail. (Note: geometric detail is not to be confused with detailed surface textures. They are independent concepts.)\* (see col. 3, lines 1-10)

Such excerpt and the remaining Chistofferson reference, however, simply mentions the viewing of a "cube." This simply does not rise to the level of detail of applicant's claimed "cube environment mapping," let alone a technique where an "LOD value is calculated for cube environment mapping," as claimed. Only applicant teaches and claims

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the calculation of an LOD value, in the claimed manner, for the specific use with cube environment mapping.

Despite this paramount distinction and in the spirit of expediting the prosecution of the present application, applicant has further amended Claim 14 and 32 to require cube environment mapping "which involves calculating a vector, and using the vector to index into a map selected from the group consisting of a cube map, a latitude/longitude map, and a sin(latitude)/longitude map" (emphasis added).

Again, applicant respectfully asserts that the third element of the *prima facie* case of obviousness has not been met, since the prior art references, when combined, fail to at least suggest <u>all</u> of applicant's claim limitations.

A notice of allowance or a specific prior art showing of each of the foregoing limitations, in combination with remaining the claim elements is respectfully requested.

In the event a telephone conversation would expedite the prosecution of this application, the Examiner may reach the undersigned at (408) 505-5100. For payment of the fees due in connection with the filing of this paper, the Commissioner is authorized to charge such fees to Deposit Account No. 50-1351 (Order No. NVIDP013).

Respectfully submitted,

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